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Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

1-21. (Canceled)

- 22. (Currently Amended) A method of detecting a gene activation event in a cell in vitro or in vivo, the method comprising assaying a host cell stably transfected with a nucleic acid construct comprising a nucleic acid sequence encoding a member of the lipocalin protein family, or a transgenic rodent non-human animal whose cells express a nucleic acid construct comprising a nucleic acid sequence encoding beta-lactoglobulin such a construct, in which the rodent cell or animal is subjected to a gene activation event that is signaled by expression of a peptide tagged lipocalin beta-lactoglobulin reporter gene.
- (Currently Amended) The method of claim 22, wherein the lipeealin beta-lactoglobulin protein is heterologous to the cell in which it is expressed.
- 24. (Currently Amended) The method of claim 22, wherein the lipoealin beta-lactoglobulin protein is coded for by a nucleic acid construct comprising (i) a nucleic acid sequence encoding beta-lactoglobulin a member of the lipoealin protein family, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues.
- 25. (Currently Amended) The method of claim 22, wherein the lipeealin beta-lactoglobulin is selected from the group consisting of: ovine betalactoglobulin (BLG) (SEQ ID NO: 23) (accession No. X12817), murine major urinary protein (MUF) (accession No. NM-031188) and rat a 2 urinary globulin (a 2u) (accession number M27434).

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(Previously Presented) The method of claim 24, wherein the peptide sequence is an
enitope.

- 27. (Previously Presented) The method of claim 26, wherein the epitope is selected from the group consisting of EQKLISEEDL (SEQ ID NO: 1), GKPIPNPLLGLDST (SEQ ID NO: 2), YPYDVPDYA (SEQ ID NO: 3), NVRFSTIVRRRA (SEQ ID NO: 4), KQMSDRRENDMSPS (SEQ ID NO: 5), SGNEVSRAVLLPQSC (SEQ ID NO: 6), SSLSYTNPAVAATSANL (SEQ ID NO: 7), RSTLQHPDYLQEYST (SEQ ID NO: 8), VSTLLRWERFPGHRQA (SEQ ID NO: 9), KFQQLVQCLTEFHAALGAYV (SEQ ID NO: 10), QEQCQEVWRKRVISAFLKSP (SEQ ID NO: 11), and RLSDKTGPVAQEKS (SEQ ID NO: 12).
- 28. (Currently Amended) The method of claim 23, wherein the construct additionally comprises a promoter element upstream of the nucleic acid sequence comprising (i) a nucleic acid sequence encoding <a href="https://doi.org/10.250/bttps://doi.org/10.250
- 29. (Canceled)
- 30. (Currently Amended) The method of claim 22, wherein the nucleic acid construct comprises a stress inducible promoter which is operatively isolated from a nucleic acid sequence encoding beta-lactoglobulin a member of the lipocalin protein family by a nucleotide sequence flanked by nucleic acid sequences recognized by a site specific recombinase, or by insertion such that it is inverted with respect to the transcription unit encoding beta-lactoglobulin a member of the lipocalin protein family, in which the construct additionally comprises a nucleic acid

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sequence comprising a tissue specific promoter operatively linked to a gene encoding the coding sequence for the site specific recombinase.

- (Previously Presented) The method of claim 30, wherein the site-specific recombinase sequences are two loxP sites of bacteriophage P1.
- 32. (Previously Presented) The method of claim 22, wherein the gene activation event is induction of toxicological stress, metabolic changes, or disease, including a disease that is the result of viral, bacterial, fungal or parasitic infection.
- 33. (Currently Amended) A method of screening for, or monitoring of toxicologically induced stress in a transgenic rodent eell or a cell line or a non-human-animal, comprising the step of detecting a gene activation event in a cell in vivo, comprising assaying said transgenic rodent whose cells express a nucleic acid construct as defined in claim 24, in which the rodent is subjected to a gene activation event that is signaled by expression of a peptide tagged beta-lactoglobulin reporter gene, wherein the gene activation event is the result of toxicological stress the use of a rodent-cell, cell line or non-human animal which has been-transfected with or carries a nucleic acid construct as defined in claim 24.
- 34. (Currently Amended) A method for screening and characterizing viral, bacterial, fungal, and parasitic infection comprising the use of a <u>transgenic rodent</u> eell, cell line or non human animal which has been transfected with or carries a nucleic acid construct as defined in claim 24.
- (Currently Amended) A method for screening for cancer, inflammatory disease, cardiovascular disease, metabolic disease, neurological disease and disease with a genetic basis

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comprising the use of a transgenic rodent eell, eell line or non human animal which has been transfeeted with or carries a nucleic acid construct as defined in claim 24.